

What is claimed is:

1 1. A siding panel for facing a structural surface substantially defining
2 a plane, wherein:

3 a plurality of such panels are mountable on the structural surface parallel
4 to one another along a direction of elongation, in lapped courses;

5 at least certain of the building panels comprise butt joint structures
6 joining said certain building panels with other such panels end to end in the
7 direction of elongation, and wherein the panels have first and second ends of
8 which the first end of one of the panels mates with the second end of another of
9 the panels;

10 wherein the complementary joint structures comprise at least one of
11 edges and slots by which the first and second ends are engageable by end to
12 end insertion in the direction of elongation; and,

13 wherein the panels and said edges and slots are structured to enable the
14 first and second ends to be engaged by relative movement in a direction
15 perpendicular to the direction of elongation.

1 2. The siding panel of claim 1, wherein said at least one of the edges
2 and slots are formed by substantially parallel web portions spaced from the
3 plane of the structural surface, alternatively fittable into one another along the
4 direction of elongation, and along a direction perpendicular to the direction of
5 elongation and parallel to the plane of the surface.

1 3. The siding panel of claim 1, wherein said at least one of the edges
2 and slots is formed by discontinuous lengths that are spaced so as to permit
3 overlapping edges of the panels to pass between one another in a direction
4 perpendicular to the plane of the surface, whereupon subsequent displacement
5 parallel to the plane of the surface engages the first and second ends.

1 4. The siding panel of claim 1, wherein each of the panels forms a
2 sawtooth in cross section, with at least an upper and a lower sloping flat part

3 being integrally joined at a step along a lower edge of the upper sloping flat
4 part, the panel thereby forming at least two courses of said sloping flat parts.

1 5. The siding panel of claim 4, wherein at least one of the first and
2 second ends has two parallel web portions spaced apart in a direction normal to
3 the plane of the structural surface, the two parallel web portions being spaced
4 by substantially a thickness of an edge of the other of the at least one of the first
5 and second ends, received between the two parallel web portions for joining the
6 panels end to end.

1 6. The siding panel of claim 5, wherein the two parallel web portions
2 are discontinuous in a lapping direction parallel to the surface and
3 perpendicular to the direction of elongation, forming tabs and gaps that are
4 positioned to pass laterally into one another, whereupon subsequent
5 displacement in the lapping direction joins the first and second ends.

1 7. The siding panel of claim 4, wherein the butt joint structure
2 comprises at least one tab spaced from a back side surface of one of the first
3 and second ends by a distance substantially equal to a thickness of the other of
4 the first and second ends that fits between the tab and the back side surface in
5 an end-wise overlap of the first and second ends.

1 8. The siding panel of claim 7, wherein the tab is placed adjacent to
2 the step at the lower edge of the upper sloping flat part.

1 9. The siding panel of claim 7, wherein the step at the lower edge of
2 the upper sloping flat part at one of the first and second ends is cut away from
3 an edge of the panel by a clearance distance permitting an engaging part of the
4 other of the first and second ends to pass between the upper and lower sloping
5 flat parts.

1 10. The siding panel of claim 9, wherein the engaging part is a tab
2 raised from the back side surface.

1 11. The siding panel of claim 10, further comprising at least one
2 additional tab raised from the back side surface of at least one of the upper and
3 lower sloping flat parts and wherein a corresponding edge at an other of the
4 upper and lower sloping flat parts is cut away from the edge to form a passage
5 for the additional tab.

1 12. The siding panel of claim 1, wherein at least one of the edges and
2 the slots is tapered in an insertion direction.

1 13. The siding panel of claim 12, wherein at least one of the edges
2 and the slots is shaped to form a frictional restriction that engages without a
3 specific detent position.

1 14. A siding panel comprising:
2 a panel body structured for mounting in horizontally elongated courses
3 having a vertical overlap at which a lower edge of an upper panel overlies an
4 upper edge of a lower panel;
5 at least one upwardly opening hook adjacent to the lower edge of the
6 upper panel;
7 at least one downwardly opening hook adjacent to the upper edge of the
8 lower panel;
9 wherein the upwardly opening hook and the downwardly opening hook
10 engage with a frictional interference fit.

1 15. The siding panel of claim 14, wherein the frictional interference fit
2 is sufficient to support the upper panel temporarily during installation, by
3 engagement of the upwardly and downwardly opening hooks.

1 16. The siding panel of claim 14, wherein at least one of said
2 upwardly and downwardly opening hooks comprises a flange spaced from a
3 plane of the panel body, and wherein the flange is at least partly flared in a
4 direction away from the plane of the panel body, thereby providing a lead-in for
5 engagement of said hooks.

1 17. A method for joining abutting ends of panels covering a surface in
2 courses, comprising:

3 providing a panel structure having a sawtooth cross section with at least
4 two sloping parts joined by a step at a lower edge of an upper one of the
5 sloping parts, and complementary joint structures facing in opposite directions
6 along an elongation of the panels, whereof a first end of one such panel joins to
7 a second end of another such panel;

8 providing a tab raised from a back side surface of one of the first and
9 second end, placed to capture an edge of the other of the first and second end
10 between the tab and the back side surface, at a position above the step on said
11 other of the first and second end;

12 providing an opening clearance in the step at the lower edge of the upper
13 one of the sloping parts; and,

14 passing the tab through the opening clearance in the step when affixing
15 the complementary joint structures.

1 18. The method of claim 17, further comprising:
2 providing at least one additional tab along at least one of the upper and
3 lower sloping surfaces;

4 providing a gap along an edge of one of the upper and lower sloping
5 surfaces for the additional tab, said gap along the edge being relatively lower
6 than a final position of the tab;

7 laying the first and second ends of the panels over one another;
8 pressing the additional tab through the gap along the edge; and,
9 displacing the first and second ends relative to one another so as to capture
10 the edge of one said panel between the back side surface and the
11 respective tab and additional tab another said panel, the tab passing through
12 the opening clearance when displacing said first and second ends.

1 19. The method of claim 17, comprising providing the additional tab
2 on each of the upper and lower sloping surfaces.

1 20. The method of claim 17, further comprising engaging one of said
2 panels during installation, by a frictional engagement with an installed second
3 one of said panels, at least at one of a butt joint and an overlap joint, and
4 temporarily holding said one of the panels.

1 21. The method of claim 20, wherein said frictional engagement is
2 made over a span of insertion depth of said one of the butt joint and the overlap
3 joint, without defining a temperature dependent position.